## Evaluation of Navigant Consulting's Long-term SDG&E Rate Forecast

*Prepared for the City of Chula Vista, California*

The City of Chula Vista asked us to evaluate a long-term forecast of natural gas and electric rates for San Diego Gas and Electric (SDG&E) that was prepared by Navigant Consulting (Navigant). Our evaluation included the validation of key input assumptions in the forecast and an assessment of the reasonableness of the forecast results, as applied to Navigant's evaluation of the City's municipal energy options.

With the exception of the natural gas utility option, we believe that the Navigant forecast and report present a reasonable evaluation of the potential benefits to the City from a range of future options for obtaining energy services. With respect to the gas utility option, Navigant has overlooked significant potential benefits that the City might capture through the formation of its own gas utility, particularly if a liquified natural gas (LNG) terminal is built in Baja California.

The following are the key conclusions of our review:

- Navigant's projection of future natural gas prices is a key driver of its forecast of SDG&E's future electric rates. Navigant's long-term forecast of natural gas prices is reasonable and is within the range of other contemporaneous forecasts. However, natural gas prices are uncertain and volatile. As a result, the City should study carefully the **sensitivity analyses** that Navigant has prepared to ensure that the City's decisions are robust over a broad range of future gas prices.

- Navigant's forecast of **wholesale electric prices is reasonable**, given current and expected conditions in the wholesale electric market that serves California. Natural gas prices are the key driver of Navigant's forecast of wholesale electric prices.

- Using reasonable assumptions for SDG&E's resource mix and generation costs, we were able to reproduce Navigant's results, to within one percent, for the generation portion of SDG&E's rates over the period 2006 - 2011. **This validates Navigant's projection of the generation portion of SDG&E's electric rates**.

- Navigant's long-term inflation forecast is too high by almost 1%. Assuming a long-term inflation forecast of 2.0% and a productivity factor of 1.5%, **SDG&E's non-generation rates should increase by no more than 0.5%**, significantly less than Navigant's assumed 1.3% annual escalation. Making this change in Navigant's forecast of SDG&E's future electric rates does not change the results of the Community Choice Aggregation (CCA) scenarios, but may reduce the economic benefits of the Greenfield Development or the full-fledged Municipal Energy Utility options.

- Navigant erroneously forecasts that Chula Vista's cost to serve a gas-fired power plant within the City would be higher than if SDG&E served the plant. Correcting just this one error indicates that a City-owned gas utility should be able to provide service at a cost similar to SDG&E's expected rates. As a result, **the City should undertake a more careful analysis of the potential benefits of a City-owned gas utility.**

- Navigant's analysis does not consider **the potential benefits of Chula Vista's location close to a potential major new source of liquified natural gas (LNG) supplies** for both California and Baja California, Mexico. Chula Vista is uniquely situated to realize substantial benefits from its proximity to the LNG terminals proposed to be built in Baja California. If an LNG terminal is developed in Baja, as both Navigant and Crossborder expect to happen, the cost of gas at the Otay Mesa border crossing will be competitive with California / Arizona border gas prices. In this event, Chula Vista's close proximity to this border crossing should give it the competitive leverage to obtain gas supplies at prices that are significantly lower than supplies moved over the traditional route through the SoCalGas and SDG&E systems. In this scenario, the potential net present value of the benefits of a City-owned gas utility would be in the range of $42 to $73 million (with the range of results depending on future SDG&E gas transportation rates). The City should monitor closely the progress of the proposed LNG terminals and the regulatory developments that will determine how those new gas supplies can reach customers in California. Finally, the potential availability of a low-cost source of natural gas could have a significant beneficial impact on the municipal energy utility scenarios in which the City develops and operates its own gas-fired power plants.